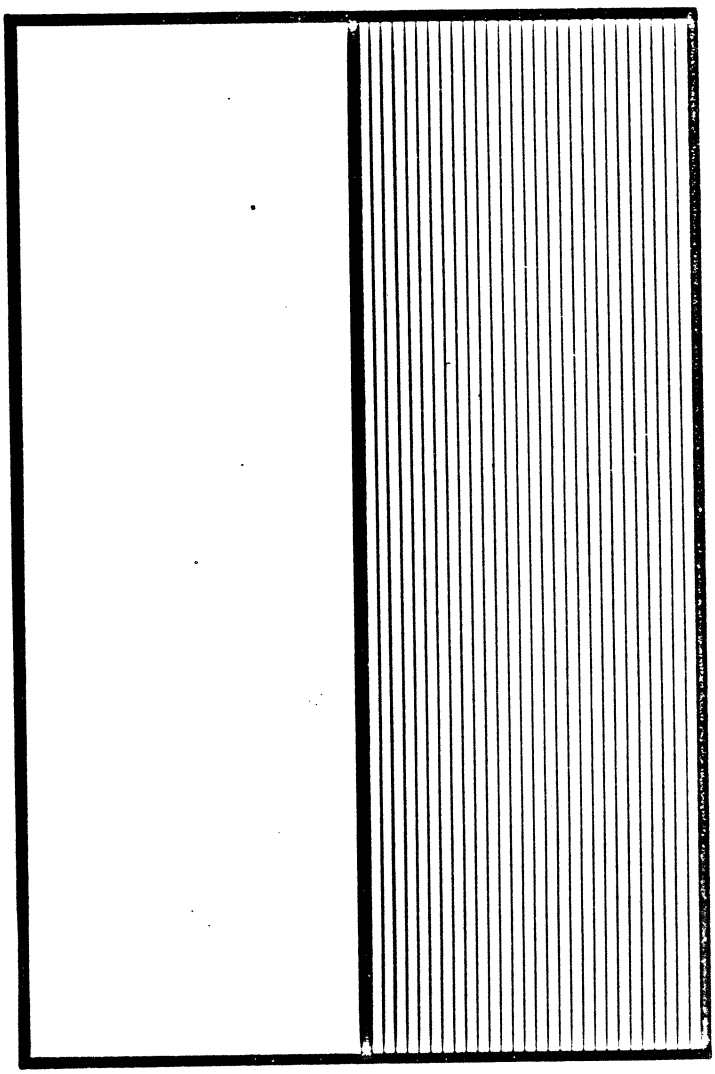
4091709

SPERRY RAND

UNIVAC 9400 SYSTEM

PROGRAM DESCRIPTION DRAWING



CUSTOMER ENGINEERING

SPERRY RAND UNIVAC

DRAWING NO. 4091709

REVISION -

CUSTOMER ENGINEERING
PRODUCT DIAGNOSTIC SOFTWARE

9400 - 5024/8424 or 8425 Disc File Mask Test
D2050

	SIGNATURE	TITLE	DATE
APPROVAL			
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APPROVAL			

REVISION STATISTICS RECORD

4091709

DWG REV	MSTR REV	RELEASE DATE	DESIGNER NAME	EIR NUMBER	FCO NUMBER
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REVISION DESCRIPTION RECORD

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-	Release to 9400 Test Library

4091709

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1. INTRODUCTION

1.1 Purpose. This document describes a 9400 Maintenance test program for the 5024/8424 of 25 Subsystem.

1.2 Major Objectives. The objective of this test program is to perform a test of the 5024/8424 or 25 Subsystem. Test organization and operator options are intended to satisfy the needs of Design, Quality Control and Field Engineering personnel in checkout, acceptance and maintenance activities.

1.3 Equipment Configurations. All equipment configurations must be connected to a Selector I-O channel of the 9400 Processor. This test will operate the following equipment configuration:

- Disc File Control - Type 5024
- Disc Drive - Type 8424 or 25
- Disc Pack Assembly - Type F12 14-01

1.4 Associated Software. This program has DSKH included as an integral part of the program. This is the standard disc handler routine used by all Disc Maintenance test programs. It is the interface between the program and MCR, which performs program load, parameterization, execution, deletion, I-O handling, and message handling.

1.5 Reference Documents

DRAWING	DESCRIPTION
S70040	UNIVAC 9400 Processor, Type 3019-00 and -01.
—	UNIVAC 9400 Dual I-O Selector Channel, Type XXXX-00 and -01.
P10076	Disc File Control, Type 5024. 8424 or 25
4091622	Maintenance Control Routine.
4091623	Parameter and Message Routines.
4091670	5024/8414 Disc Program Handler.

2. FUNCTIONAL DESCRIPTION

2.1 General Organization - This MAR checks the effect that the Set File Mask Command has on seek commands and the various write commands. Two Set File Mask Commands are executed in one chain with various invalid bit combinations.

2.2 Subtest Descriptions - Each of the following subtests is described by stating its objective and the method used to attain it.

2.2.1 Subtest 1 - (Group Test)

Objective - This subtest enables the operator to internally select Subtests 2 thru 4 simply by entering Subtest 1.

Method - The proper entry sets bits in the parameter location which indicates to DSKH the appropriate subtests to enter.

2.2.2 Subtest 2 - (Recalibrate and Seek File Mask)

Objective - This subtest checks the effect that each bit in the File Mask has on Recalibrate, Seek, Seek Head, and Seek Cylinder Commands.

Method - All of the pertinent bit configurations of a File Mask are tested with the Recalibrate, Week, Seek Head, and Seek Cylinder Commands.

2.2.3 Subtest 3 - (Write Command File Mask)

Objective - This subtest is designed to check the effects of the File Mask Command on various write commands.

Method - All of the pertinent bit configurations of a File Mask are tested with the Write HA, Write Record 0, Write CKD, Write KD, and Write Data Commands.

2.2.4 Subtest 4 - (Two Set File Mask Commands)

Objective - This subtest is designed to check the effect of two File Mask Commands on a Seek Head Command when the three commands are contained in the same chain.

Method - A series of chains, each with two Set File Mask Commands having masks with invalid bit combinations, are tested with the Seek Head Command.

3. OPERATING PROCEDURES

The Disc Handler Routine (DSKH) functions as a standard interface between the Disc Test Program and the MCR. Standard operating procedures for disc test programs are described in the DSKH document, Drawing Number 4091

3.1 Initialization - The procedures used by this program are common to most other Disc MAR's and are described in the DSKH document. The Load Name for this program is D2060

3.2 Test Program Parameters - Standard parameter information applicable to this MAR is described in the DSKH document.

3.3 Test Program Messages - All test entry and exit messages and a standard I/O error message are described in the DSKH document. Data handling by this MAR includes error detection and error message generation. The only error message printed will be the standard I/O error message shown in the Disc Handler Document.

4. SUPPLEMENTARY DATA

4.1 Supplementary Software Information - Each subtest of this MAR is entered separately by DSKH and stands alone. It can be extracted from the rest of the MAR and either eliminated or assembled by itself with DSKH.

For further information see Section 4 of the DSKH document, Drawing Number 4091702 and other sources listed in Paragraph 1.5 of this document.

4.2 Supplementary Hardware Information - For additional hardware information consult Section 4 of the DSKH document and the appropriate sources listed in Paragraph 1.5 of this document.